

PDF technical sheet

22256BL1

Double row spherical roller bearings

Spherical roller bearing, with central rib on inner ring, 2-part machined cage centred on inner ring, groove and lubrication holes on outer ring

Product definition	
d	11.0236 "
D	19.6850 "
B	5.1181 "
d2	13.9764 "
D1	17.0866 "
rs min	0.1969 "
Number of lubrication holes	8
b	0.7874 "
k	0.4724 "
e	0.26
Y1	2.57
Y2	3.83
Y0	2.51
Radial clearance class	CN
Brand	NTN

Product performance	
Dynamic load, C	2,310 kN
Static load, C0	3,800 kN
Fatigue limit load, Cu	309 kN
Nref	1,000 RPM
Nlim	1,200 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	7.29 Hz
Characteristic outer ring frequency, BPF0	8.67 Hz
Characteristic inner ring frequency, BPFI	11.33 Hz

Abutment dimensions	
da min	11.8110 "
Da max	18.8976 "
ra max	0.1575 "

Calculation factors

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	Y1	0.67	Y2

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

X_0	Y_0
1	Y0

The values for e, Y1, Y2 and Y0 are shown in the above table .